

03040204-07

(*Brunson Swamp*)

General Description

Watershed 03040204-07 (formerly 03040204-090 less Palmetto Swamp) is located in Horry County and consists primarily of ***Brunson Swamp*** and its tributaries. The watershed occupies 44,600 acres of the Lower Coastal Plain region of South Carolina. Land use/land cover in the watershed includes: 43.9% agricultural land, 30.8% forested wetland, 17.4% forested land, 6.0% urban land, 1.2% scrub/shrub land, 0.6% nonforested wetland, and 0.1% water.

Brunson Swamp accepts drainage from Chinnners Swamp (Rabon Branch, Mill Branch, Savannah Creek, Big Swamp, Schoolhouse Branch, Evans Branch), and Spring Swamp (Holly Hill Branch) before draining into the Little Pee Dee River. There are a total of 83.0 stream miles and 73.0 acres of lake waters in this watershed. All are classified FW with the exception of Chinnners Swamp, which is classified FW* (dissolved oxygen not less than 4.0 mg/l and pH between 5.0 and 8.5).

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
PD-177	S/W	FW*	CHINNERS SWAMP AT S-26-24 1.9 MI SSE OF AYNOR
PD-352	W/INT	FW*	CHINNERS SWAMP AT GUNTERS ISLAND ROAD OFF S-26-99

Chinnners Swamp – There are two SCDHEC monitoring sites along Chinnners Swamp. This is a blackwater system, characterized by naturally low dissolved oxygen concentration conditions. Although dissolved oxygen excursions occurred at both sites, they were typical of values seen in blackwater systems and were considered natural, not standards violations. At the upstream site (***PD-177***), aquatic life and recreational uses are fully supported. Significant decreasing trends in five-day biochemical oxygen demand and fecal coliform bacteria concentration suggest improving conditions for these parameters. Aquatic life uses are fully supported at the downstream site (***PD-352***), but recreational uses are partially supported due to fecal coliform bacteria excursions. There is a significant decreasing trend in pH. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter.

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM</i>	<i>NPDES#</i>
<i>FACILITY NAME</i>	<i>TYPE</i>
<i>PERMITTED FLOW @ PIPE (MGD)</i>	<i>COMMENT</i>
MILL BRANCH TRIBUTARY	SCG730383
GOODSON CONSTRUCTION/ANDREW PIT	MINOR INDUSTRIAL
PIPE #: 001 FLOW: M/R	

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

**LANDFILL NAME
FACILITY TYPE**

**PERMIT #
STATUS**

TOWN OF AYNOR DUMP
MUNICIPAL

CLOSED

Mining Activities

**MINING COMPANY
MINE NAME**

**PERMIT #
MINERAL**

GOODSON CONSTRUCTION COMPANY
ANDREW PIT

1369-51
SAND SAND/CLAY

JACOB JOHNSON LANDCLEARING
J & J MINING MINE

1656-51
SAND; SAND/CLAY

D&L SITEWORK INC.
GUNTERS ISLAND MINE

1722-51
SAND

JARRETTS LANDCLEARING
HUGHES MINE

1757-51
SAND

Water Quantity

Portions of this watershed fall within the Waccamaw Capacity Use Area and large groundwater uses must be reported (see Capacity Use Program p.27).

Growth Potential

There is a low potential for growth for most of this watershed. An exception is the U.S. Hwy. 501 corridor that bisects the watershed. This heavily traveled road connects I-95 with Myrtle Beach, and an increase in residential and commercial growth is likely. The Town of Aynor has been connected to the Grand Strand Water and Sewer Authority Conway wastewater plant, which should encourage growth. The northeastern edge of the watershed contains water infrastructure and should see a moderate increase in development. The remainder of the watershed is rural with agricultural, timberlands, and residential areas. The proposed Preferred Alternative route of I-73 (Southern Corridor) would cross this watershed and could bring some growth to the area, especially around interchanges.

Watershed Restoration and Protection

Total Maximum Daily Loads (TMDLs)

A TMDL was developed by SCDHEC and approved by EPA for *Chinners Swamp* water quality monitoring site **PD-352** to determine the maximum amount of fecal coliform bacteria it can receive and still meet water quality standards. OSD systems may represent the major source of fecal coliform loadings, and swine AFOs may also contribute substantially to elevated concentrations. Wildlife and cattle may also contribute fecal coliform loadings. The TMDL states that a 39% reduction in fecal coliform loading is necessary for the stream to meet the water quality standard.